DUALSKY® Volt. Regulator 3A
Instructions

The VR-3 is a switch-mode DC regulator separated from ESC, it will take high-voltage (5.5V-23V) power from your battery pack and convert it to a consistent safe voltage for your receiver, gyro and servos. The VR-3 allows you to easily choose whether to run your system at 5 or 6 volts. Running at 6 volts gives faster servo speed, and most modern receivers and servos will work fine at this voltage.

SPECIFICATIONS

1. **Output:** 5V/3A or 6V/3A, MAX. 5A(10% Duty)
2. **Ripple:** <50mVp-p(@2A/12V)
3. **Input:** 5.5V-23V (2-5s lithium battery pack, 5-15cells NiMh / NiCd battery pack)
4. **Size:** 43 x 19 x 8mm (length x width x high)
5. **Weight:** 8g(cables included)
6. **Idle power consumption:** < 10 ma from battery
7. **Connections:** Red/black 24 ga. Wire pair for main power in, 24 ga. red/black Servo lead out to Rx, JR style
8. **Controls:** Jumper selects 6v or 5v output
9. **Indicators:** green LED shows power ON
10. **Installation:** recommend mounting in airflow to improve reliability and efficiency

FEATURES

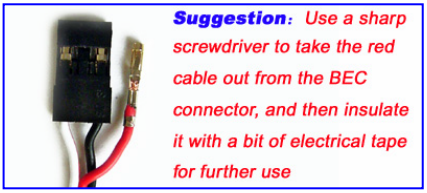
1. VR-3 is an advanced switching regulator, provides over-current and over-heat protection function, and the switching frequency is 300KHz.The max efficiency of this chip is 92%.
2. The smallest size and the lightest weight.
3. Compare linear BEC with switch-mode BEC: When using a lithium battery pack more than 3s, a switch-mode BEC has much higher efficiency than linear BEC.
4. Reverse polarity protection at input is provided.

How to use VR-3:

NOTE: You may want to wire in a switch so you can control the VR-3 and thereby your receiver power more easily and safely.

1. **When setup into GLOW models or w/ESC HAS NOT BEC function**
   No change is needed for ESC, just connect the input cables of VR-3 with the battery, and plug the VR-3's output cable (connector) into one spare channel of receiver.

2. **When ESC HAS BEC function**
   You must disable the BEC function of ESC, i.e. you must first cut the red wire in the trio of receiver wires. Simply use a pair of wire cutters to remove a short section of the red wire near the receiver connector, and insulate the cut wire with a bit of electrical tape.



How do I mount this in my airplane?

Give it some air flow. In normal usage it won't get very warm at all, However, when something goes wrong, like a control surface or landing gear getting stuck, and causing a steady high current flow, a very small BEC, even a switching BEC, can overheat because it cannot dissipate enough heat. The nice flat surface is where it gets rid of heat. It's very tempting to use that surface to Velcro or double-side foam tape it to something to mount it. Instead, mount it using the "bumpy" component side. Make sure that the wires are not being pulled on.

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Note: Please see the additional warranty information insert (if applicable) or ask your retailer for more information.

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